



THE

JACG

NEWSLETTER

JACG

THE JERSEY ATARI COMPUTER GROUP

VOLUME 8 NUMBER 3

BBS : 201-298-0161

MAY 1988

FROM THE EDITOR'S DESK

For those of you who have experienced difficulty in using DAISY*DOT II, please read my NOISE from NOYES column this month.

I got another ANALOG this month, perhaps I'll get full utilization from my subscription! Speaking of ANALOG I recently had a lengthy phone conversation with the publisher of ANTIC, James Capparell. As some of you know, he was a bit taken aback by my suggestion that, if ANALOG were to "go under", an alternative (suggested by me) could be either PAGE 6 or ATARI USER (both ATARI magazines from the U.K.). His concern was, why didn't I suggest ANTIC as an alternative? I explained that I made my suggestion from the point of view of one who already subscribes to ANTIC. To me, ANTIC and ANALOG were not alternatives to each other...but both **REQUIRED** publications for the ATARI community!

I hope that this sets the record straight, and that any initially disrupted sensibility has been put right...as any perceived slight was neither a slight nor an intentioned slight; but while were at the level of sensibilities...I felt slighted by the cursory treatment given the JACG by ANTIC in their recent issue in which (excellent and well-deserved) coverage was given to the JACS and ACENNJ. Perhaps in a forthcoming issue? 'Til next month...

D. B. Noyes

Lashen Electronics Inc

21 Broadway
Denville NJ 07834
201, 627-3783

IN THIS ISSUE ...

President's Report - D. Van Hook.....	3
Noise from Noyes - D. B. Noyes.....	3
Hard Drives - P. Machiaverna.....	4
Guide to DAISY*DOT II - P. Greenhut..	4
dbMAN - P. Machiaverna.....	5
Saracen - W. Van Dost.....	6
I. B. Drive - P. Machiaverna.....	6
Letter to the JACG - B. Martin.....	7
If You were President - D. Forbes....	9
Programming ATARI BASIC - J. Beebe...	10
PD6 16 - L. Peckham.....	16

CALENDAR OF EVENTS

JUNE 3, 1988	Exec Board Meeting
JUNE 11, 1988	ATARI SAFARI
JULY 9, 1988	JACG Monthly Meeting



ATARI®

ST

Computer System

48000 MICROPROCESSOR - 8 MHZ CLOCK - RS232 SERIAL PORT - PARALLEL PORT
 HARD DISK DRIVE PORT - CARTRIDGE PORT - SECOND FLOPPY DRIVE PORT - 192K ROM
 MIDI INTERFACE - TOS OPERATING SYSTEM - GEM DESKTOP - 512 COLORS
 MONOCHROME 640 X 400 RESOLUTION - COLOR 640 X 200 RESOLUTION

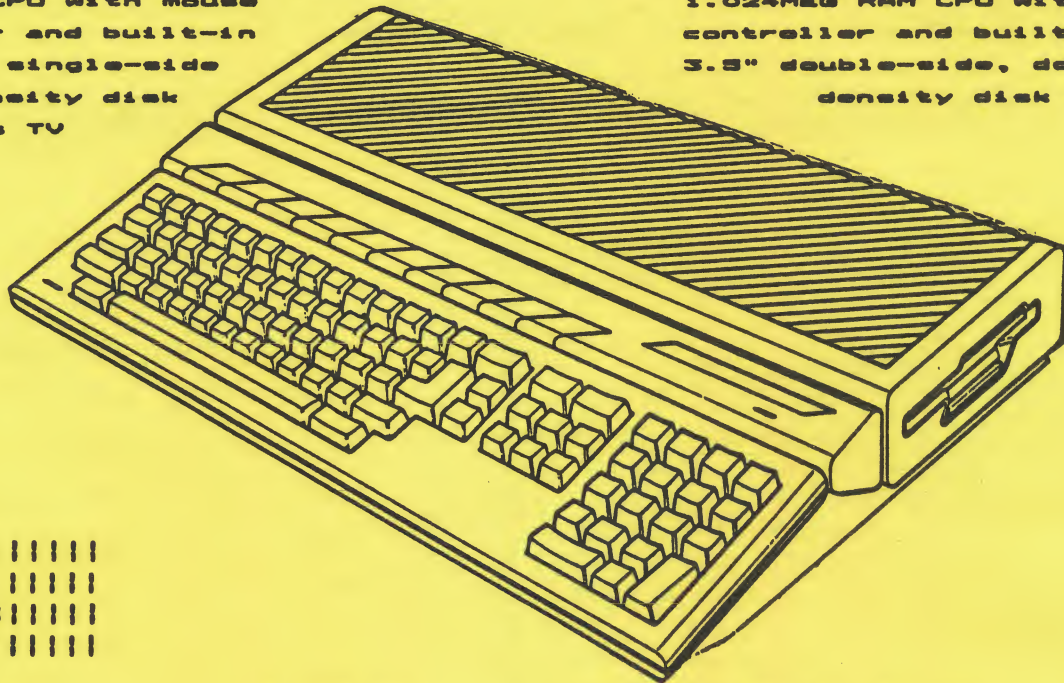
90-day Warranty - Over-the-Counter Exchange

520ST™.....\$ 549.95

512K RAM CPU with mouse
 controller and built-in
 360K-3.5" single-side
 double-density disk
 drive plus TV
 output

1040ST™.....\$ 709.95

1.024MEG RAM CPU with mouse
 controller and built-in 720K
 3.5" double-side, double-
 density disk drive



|||||
 MONO |||||
 SYSTEMS |||||
 |||||

520ST™ CPU with\$ 699.95

ATARI SM124 Hi-Res B&W Monitor

1040ST™ CPU with.....\$ 859.95

ATARI SM124 Hi-Res B&W Monitor

|||||
 COLOR |||||
 SYSTEMS |||||
 |||||

520ST™ CPU with\$ 789.95

MAGNAVOX CM8505 Med-Res RGB Color
 Monitor

1040ST™ CPU with.....\$ 949.95

MAGNAVOX CM8505 Med-Res RGB Color
 Monitor

520ST™ CPU with\$ 889.95

ATARI SC1224 Med-Res RGB Color
 Monitor

1040ST™ CPU with.....\$1049.95

ATARI SC1224 Med-Res RGB Color
 Monitor

|||||
 |||||

GEMINI ENTERPRISES
 86 Ridgedale Avenue
 Cedar Knolls, NJ 07927

(201) 267-0988

PRESIDENT'S REPORT

by Doug Van Hook

The Ken Gordon show was a qualified success! When the show ended JACG had three new members, and a few dollars more in the treasury. The show didn't make a lot of money, but it did attract a crowd for the entire duration of the show!

Picture a crowded computer show, with a maze of tables set up in rows. Then imagine a HUGE multi-colored ATARI banner suspended high above the crowd. Gary Gorski was able to spot our two tables the second he walked into the Aspen Hotel. Right next to the ATARI banner was the JACG banner suspended in the same fashion. Bob Mulhearn gave the show the look and feel of a professional presentation.

Four computers were running during the show! The computers and keyboards were facing the crowd, manned by Linda Peckham and Bruce Mittleman. The computers were held by specially designed platforms provided by Bob Mulhearn. Bruce's ST running MAGIC SAC was a real surprise for most passers-by. A lot of people questioned the sign which said, "The ATARI can run APPLE, IBM, ATARI 8-BIT, and CPM software."

Our evaluation drawn from the show, is that a second show near Christmas would be even more successful. From talking to other groups, we feel an Atarifest, or all ATARI show, is NOT a good idea! Participation in this show has benefited us in many ways. We learned a lot about the marketplace, and found out more about our own potential.

We now have enough ATARI SAFARI demonstrations for our JUNE Meeting. They are as follows:

Mike Hochan - 16-Bit Beginner's Class.
Eric Jacovis - ST Color Printer Demo.
Linda Peckham - Publishing Professional.
Ted Clancy - 16-Bit Music Composition.
John Dean - Fleet Street Publishing.
Don Forbes - SYNCALC demo for 8-Bit.

Dave Noyes - 8-Bit Beginner's Class

Hacker's Contest Clue:

WATERGATE

W A T E R G A T E

NOISE FROM NOYES

by Dave Noyes

Got a letter/article from Phil Greenhut the other day, in which he documents his experience w/ DAISY#DOT II. His article appears elsewhere in this issue - in its entirety. When you read it, please read it in the context that it was written w/out Phil's knowledge that I had posted a message on our (JACG BBS) regarding several phone calls received from others who had great difficulty in getting DAISY#DOT II to work...especially in the printing of the documentation.

First...as I said at the meeting when I demonstrated DAISY#DOT II (DDII), I did NOT have a copy of the JACG's two-disk DISK of the MONTH set (as they were being produced), I had my one (two-sided) disk.

Second, there is nothing fatal with the JACG's disks...just the arrangement of the various files on the disks. As the documentation is printed utilizing 12 fonts...all of those fonts MUST be available during the printing of the documentation. Thus, if you have a one-drive system...the fonts and the documentation files must be on the same disk. It's a bit easier w/a multi-drive system...as your fonts could be on drive one, and your documentation files on drive two.

ATARI SAFARI!!

JUNE 11, 1988

AT&T LABS

8-BIT ANIMATIONS!

SYNCALC!

FLEET STREET PUBLISHER!

ST COLOR PRINTER! THE BEGINNER'S ST! PUBLISHING PARTNER! MIDI AND MUSIC!

COME JOIN THE FUN!

**Berkeley Microsystems
Hard Drives
for the Atari ST Computers**
Paul Machiaverna - JACG

If you are looking for an alternative hard drive to the relatively expensive Atari 204, then Berkeley Microsystems (BMS) has got for what you are looking. BMS is a small company located in Oakland, California which really knows how to give Atari users 'Power without the Price.' They are who build the BMS-100 Hard Disk Interface. This interface connects to the DMA (Direct Memory Access/'Hard Disk Port') port on all Atari ST computer models. You see, the DMA of the ST is not designed for direct connection of hard drives. The DMA is a multi purpose, high speed parallel Input/Output port. It can be used for connection of many different peripherals, such as the currently available Hard Drives and Laser Printers. So, this is where the BMS-100 comes into play. It will interface the ST's DMA to the standard SCSI (Small Computer System Interface) port used for many Hard Drive Controllers. A battery backed up date/time clock is also part of the interface for proper stamping of files without the need of setting the date/time everytime you boot your computer.

With the BMS-100 you are able to connect any SCSI hard disk controller to your ST. Thus, allowing a very wide choice of hard disk systems. Once you choose a hard disk controller you can choose a hard disk which suits your capacity needs. Just be sure that the hard drive is compatible with your controller. The hard drive controller recommended and sold by BMS is the Adaptec ACB-4000, and with good reason. This controller is capable of driving two compatible hard drives following MFM or RLL data schemes and ST506/ST412 compatibility. So, let's say you buy a 20 Megabytes hard drive now and decide to expand to 40 Megabytes later. No problem for the Adaptec. Just connect your second 20 Megabyte drive. You can combine any drive capacities as long as both are either MFM or RLL. The BMS-100 is compatible with the Laser Printers which use the DMA port. You can address the hard drive(s) to DMA port addresses 0 through 6. The clock is fixed at address 7.

The BMS-100 comes complete with all necessary cables and software for use with all ST computers. The manual supplied is very clear and concise with information about the BMS-100, the Adaptec controller and many different hard drives. You still have to buy a Hard Drive Controller, the Hard Drive(s), a power supply, and a case to house the system. Is the BMS hard disk system for you? If you don't mind looking over specification sheets a little and shopping for the best prices on the hard drives, yes! Also note that you will also need to assemble the system. But, BMS will assemble and test a complete hard drive system for you as long as you buy all the components from them (as I did). I must tell you that their prices are fantastic on all the components. I bought a Seagate hard drive from them and they beat everyone else's prices by at least \$100.

There are a couple of things to keep in mind when buying hard drives for the Atari ST computers. First, it may be very tempting for a bulletin board system operator to buy a very large hard drive to handle a large base of messages and files. But, TOS will only recognize 64 Megabytes of a hard drive. To correct this problem you will have to obtain a software patch to TOS to get around this problem. BMS is working on one such patch and should be available soon. Second, on larger capacity hard drives it is advantageous to use many folders (sub-directories). But, TOS has a limit of 40 folders. Again, a software patch is needed. Luckily, this patch is readily available on most bulletin boards at no cost. Lastly, when you buy a case and power supply consider future expandability options. Is the case big enough to house another hard drive? Can the power supply handle the load of another hard drive?

Berkeley Microsystems deserves all the credit possible. Chris and Vance are the two people running the company and are very helpful. A phone call to them will provide you with answers to any of your questions concerning hard drive systems for your ST. Their phone number is:
(415)-465-6956,
or, write to them at:

Berkeley Microsystems
360 Oakland Ave. Suite 5
Oakland, CA 94611

**A BEGINNERS GUIDE
TO THE BEGINNING
OF
DAISY*DOT II**

Philip Greenhut - JACG

As a five year Atari veteran I still consider myself beginner especially whenever something doesn't work as stated.

It took me almost two hours to get the Disk of the Month Daisy-Dot II to work. We decided to try to prevent other beginners and veteran beginners from going thru the same thing.

I The first step is to load DOS into your computer. The second is to put Disk B into your drive. Hit A Return Return. If you don't know how to do this we suggest you get a JACG big brother. This will give you the disk directory. You will see the file README.DOC. Then hit Selection C, copy file in DOS. It will ask you for starting file, ending file. Put in the following:

README.DOC,P:

You will then print out about one half page of README which is entitled " STEPS FOR PRINTING DAISY-DOT II DOCUMENTATION."

Paul Machiaverna - JACG

READ THIS PAGE VERY CAREFULLY AND REALIZE IT IS INCORRECT.

I It says the documentation will cover 24 pages. Mine stopped at eighteen pages and in mid sentence which we tried several times.

II It then tells you how to change the file name extenders in #1 and #2 if you have Star Gemini/SG or Epson MX III printers.

IF YOU HAVE THE FOLLOWING PRINTERS NO CHANGES ARE NECESSARY. This is a change from what was said at the March meeting. No changes are necessary for the EPSON EX/FX/JR/LX/RX models. If you have these EPSON models and certain other compatibles just jump over steps 1 & 2. You can read this after you print the full documentation on the bottom of page 2 and top of page 3. And it worked on my Epson FX.

III Then came the killer in the printing on the Documentation in the steps for printing.

A. Two little simple errors which will separate the amateurs from the professionals. First the file name and extender in #5 are "DDIIDOC.1" IS INCORRECT. It is close but incorrect and should read DDIII.DOC. Notice DOC should be the extender not the 1 and the 1 goes next to the II. For those of you who value your sanity never use a program with file extenders like capital I's and l's.

B. The second error without further comment in #12 is listed as "DDIIDOC.3". This should read "DDIII.DOC".

III Lastly I expected my documentation when it listed the FONTS to show what each one looks like. I was wrong it will only prints in ROMAN or what ever other font you picked originally.

You then are left with the task of printing samples of each FONT and keeping them where you can find them. I couldn't find out how to get them all to print one right after the other without reloading. If you can please let me know.

We did this report with Word Magic. I think you will find it the best menu driven word processor on the 8-bit and you can get better NLQ than with Daisy. If you have any questions on Word Magic you can call me.

In closing this is a good disk. It showed me I still can tough it out to find a solution. It does a nice job on the FONTS. Try it you will like it but remember the above hints for sanity.

I just wonder will an ST really make life easier?

A few months ago I wrote an article about Versasoft's dbMAN relational database program. The program I reviewed then was version 3. Version 3 of dbMAN is by far the best database program available for the Atari ST computers, and because it is available on several different computers it is ideal for porting over to other machines. dbMAN is very much like the very popular and way overpriced dBASE program made famous on the IBM computers. Versasoft took the power of dBASE and linked it to a very reasonable price, just like Atari did with the introduction of the ST series of computers. I have done extensive programming with the built in language of dbMAN and have found it to be very powerful. The built in programming language commands and functions are a boon to the programmer needing to write a database application. So, what else could we ask for? Let's talk about Version 4!

Version 4 of dbMAN by Versasoft is a truly worthwhile upgrade to the already powerful version 3. Essentially, version 4 is a lot more like dBASE 3 Plus. Many more commands and functions have been added to further simplify your programming tasks. But, many of the new commands allow the user to tap more of dbMAN's power without the need for writing programs. Browse and Shop are two such added commands which allow the user to easily view and edit database files. Also included are commands to convert dBASE file formats to dbMAN file formats. A wealth of functions have been added to facilitate the programmer with easy methods of manipulating and converting data and datatypes.

The use of dBASE command files are now more easily converted to dbMAN command files due to the greater compatibility. The new manual supplied explains the slight differences between dbMAN and dBASE and how to convert certain commands to make them work properly. This makes it very easy to use many of the already written dBASE files on many bulletin boards systems. As of this writing, dbMAN is available on the Atari ST, IBM PC, Apple Macintosh, and Commodore Amiga. So, if you are considering writing database applications for a profit dbMAN is a very wise choice for portability. A new runtime package is available for encrypting and tokenizing your source code files and is a must for any programmer who wishes to sell his or her programs without prying eyes looking at there work.

The upgrade fee for version 4 is \$45 for registered version 3 users. I believe that the cost of version 4 up front is around \$150. This may seem a little steep for casual users, but any serious database application needs this kind of power and speed to make it an efficient time saver in a business situation. If you have any questions about dbMAN, leave me E-Mail on the JACG BBS. See you there!

SARACEN (ta)

Neil Van Oost - JACG

SARACEN, an action strategy game from Datasoft, distributed by Electronic Arts. Created by Ilan Ginsburg, Atari translation by Greg Hiscott.

Long ago, in the Middle Ages, zealous young Christian adventures banded together to drive the Saracen infidels from the Holy Land. As one of these bold soldiers, Ilan the Crusader, you become separated from your companions and find yourself in a huge Saracen fortress. Alone, armed with only a longbow, you must battle your way through the fierce castle guards and attack the Saracen Chief himself.

So reads the introduction on the box. At first I had some reservations about buying another maze game. After the first couple of screens, I was thinking, "Oh, this is too easy, no challenge". I wizzed right through the first seven screens in a little over forty minutes, with only three restarts. Then WHAMO I ran into screens eight and then nine. I only died a couple of times to get through screen eight, that is to say a couple of times and a couple of nights later. Now I'm on screen nine and the soldiers are very active. I can't seem to survive here for very long.

I think I'm hooked, last night I was playing til late. I could tell it was too late by the road maps on my eyeballs staring back at me as I shaved this morning. There is a nice feature in this game, you can start at any of the 100 levels. I know that none of you out there would do that tho -- after all a true Saracen addict always starts from screen one.

Over all I would rate Saracen a five star game. It is very easy to play(although not to win) and holds your interest. If as a last resort you cannot get by a screen, you can restart the game at the next one. I'll not gurantee that you will live any longer there tho, but at least you will keep your frustration level down.

I. B. Drive for the ST

Paul Machiaverna - JACG

Tired of spending lots of money for expensive 3 1/2" disks? Wouldn't you rather have the option of using the lower costing 5 1/4" disks? How would you like to be able to read and write an IBM format disk? What if you have PC Ditto and would like to use the 5 1/4" IBM disks? If you want to have the capabilities listed above then I.B. Computers has a great product for you; the I.B. Drive.

The I.B. Drive is a 5 1/4", double sided drive for the Atari ST computers. It is installed as your 'B' drive, as accessed from TOS. Currently, only a 40 track version is available which will yield an approximate capacity of 360

Kilobytes of data. An 80 track version is advertised but is not available due to problems which were encountered from using an 80 5 1/4" drive with the ST. Hopefully, this can be resolved in the future and will give you twice the storage space (720K). Incidentally, a 40 track, double sided 5 1/4" drive is what is used on the IBM XT computers. What is not made well know by Atari is that TOS can read practically any IBM format disk. That means that you can simply place an IBM format 5 1/4" or 3 1/2" disk into your drive and read it without any problems. Of course, your ST cannot run IBM programs without an IBM emulator such as PC Ditto. However, an IBM cannot read an Atari ST formatted disk. So, if you want to place some files on a disk for someone with an IBM, format the disks on the IBM first. Then use your ST to write the files onto the disk.

The I.B. Drive is a complete and ready to use drive. There is nothing for you to do except plug in the drive to your computer (or 'A' drive) and connect the power. The power supply for the drive is housed inside a sturdy metal case. The drive mechanism is the tried and true Teac half height 5 1/4" drive and should give years and years of trouble free service. Also included with the drive is documentation for installing the drive and instructions for placing a special file in an AUTO folder of your boot disk. This special file is a program which tells TOS to use a slower head stepping rate for the 'B' drive during boot up. The reason for this is that the 3 1/2" drive used as the standard drive on the ST is a faster reading and writing drive than the 5 1/4" drive (The stepping of the head can be felt if you place your hand on the drive case during a disk format or access). The original program used to slow down the stepping rate did not work on the Mega ST computers. A revised program is now available which will work properly on both the two and four TOS ROM versions of the Megs. A word

of caution to anyone using a 5 1/4" drive on the ST; NEVER, NEVER use the Format Disk option from the GEM desktop drop down menu for formatting a 5 1/4" disk! The disk format routine of TOS is written only for 3 1/2" disks. Failing to heed this advice will result in knocking the 5 1/4" drive head out of alignment and possibly cause permanent damage to the mechanism. I.B. computers provides a format utility program with the I.B. Drive for use with all 5 1/4" and 3 1/2" drives.

I.B. Computers has provided the ST user with a rock solid 5 1/4" drive. For users of PC Ditto this drive is a must for easy swapping of disks with IBM PC users. I have used the I.B. drive for four months without any problems. That is a lot more than can be said for many who have tried to build their own 5 1/4" drive for the ST from a kit with disastrous results. I use the lower costing 5 1/4" disks for all my public domain files and for hard disk backups. At \$219, the I.B. drive is the first complete and reliable 5 1/4" drive for the ST. I recommend it highly.

Letter to the JACG

24 Main Street
Flemington, NJ
08822
(201) 788)5533
Lebanon, NJ
(201) 236)9575
FAX: (201) 788)9406

April 26, 1988

Dear fellow JACG members:

Back in 1983, when my wife announced the imminent birth of our first, (and may I add, only) child, I did not panic! No sir, not me! "Computers!", I uttered; (to paraphrase the first line of the movie, "The Graduate"). "Computers; I have learn computers!" Although my total education on the subject amounted to nil; I did realize that the future was upon me and the future was computers. Two months later I was enrolled in "Fundamentals of Data Processing", at my local college. The future was here, and I was ready! I studied diligently, learning all of the terminology and catch phrases.

A month later I found out the meaning of the words, "vapor)ware," when I tried to buy a "Spectravision" computer. Numerous calls to local computer stores led me directly to the manufacturer who admitted that the item didn't even exist. I assume that marketing, had discovered that it would be cheaper to run full page, color advertisements in all of the magazines rather than to produce the computer. Makes sense to me! No computer? No problem; because the very next day, Sears ran a sale! An Atari 800 would cost me \$200, including the \$100 rebate. I would have to settle for 48 K and an Atari since; 1. It was bargain! 2. All of my high tech friends at AT&T had one! 3. There was a lot of software available for the Atari. A Commodore 1701 monitor, Percom disk drive and a Prowriter printer, with interface finished off my hardware requirements. Microsoft Basic, Atariwriter and a lesson from a friend on making duplicates, fulfilled my software needs. Add about five boxes of disks at \$20 per, and I was ready! It had only cost me \$2000 to enter the "Fun World of Computing." Yes sir; a real bargain! Little did I know!

Meanwhile, back at school, the instructor was teaching Basic and I had no idea what he was saying. A few months earlier a friend had given me a study course on the subject and after a week, I had given it back to him. I took my problem home, sat down at my Atari and with no pressure, translated the PDP 11 Basic instructions into Microsoft Basic. Two weeks later, I caught up with the rest of the class. Three weeks later I was assisting the instructor by explaining the programs to the rest of the class. The Atari and Microsoft Basic had saved the day. I ended up "Ace)ing"

the course and finally had figured out what I wanted to do when I grew up. Little did I know that maturity was getting ready to jump out and grab me with very tiny hands.

There's nothing like a hot, humid Saturday morning in August to give you a fond appreciation of central air conditioning. My computer was forgotten this day as I had to wallpaper the kitchen. I finished the task uncereemoniously at about 7 P.M. and my wife and I elected to go out to dinner. Lobster Tails and filet mignon were the order of the day because the house was finally in shape and I could relax for a week or two before the baby was born. Home, to bed and at 4 A.M. my wife told me that my week off had been, "called on account of baby." Now I could stay up at night taking care of "the kid" and secretly playing with my computer. That was when I started putting in no less than 40 hours a week on my Atari. In the months that followed I bought a modem, a second disk drive, (an Indus), thousands of dollars worth of software and a subscription to Compuserve. Eleven magazine subscriptions and hundreds of hours on Compuserve later, I joined the JACG.

My total outlay to this point had been about \$10,000 and it never seemed to stop. One has to remember my initial motivation for this folly. I wanted to learn about computers so I could teach my son! Three more modems after my first one died, two Atari 1050 drives with Happy enhancement, 80 or so books, a new printer interface with a 64 K buffer, hundreds of disks, a tape drive, two Atari 130 XE computers, (one died), an ATR 8000 with two DD/DS drives and I wasn't stopping there. It was now time for my son to get into computers so a second hand Atari 400, second hand color TV and a myriad of cartridges later, I realized that I was addicted. My wife was telling me to say, "NO" and I was calling her, "Nancy."

A Kola pad, Computer eyes, trackball, Nico joy stick, light pen, the JACG library, more programs and more disks! Now I purchased in disks in multiples of 400. A dedicated telephone line for the computer! STOP!!! Enough, already!!! That was the mortgage money! Being caught sneaking into the house with software under my coat, was the last straw. Fortunately, by this time the flow of Atari 8 bit software had ebbed. It was time for reflection.

The problem was that there just were not enough 64 K machines out there in Atari land to warrant further development. Program memory requirements had multiplied. Both the Commodore and the Apple were 64 K but the Atari was still only 48 K. The entry of the XL and the XE series was too late to save the system. "K", not piracy was the reason for the fall of Atari. The 48 K, installed base was not upgrading to the new systems. It would take too many programming tricks to squeeze a 64 K program into 48 K. It was about that same time that I reasoned out that the 8 bit Atari was not so highly regarded in the world of business computing. The new Atari ST's were hitting the market. Should I buy one, or wait until the price came down? There

was another, simpler alternative and it didn't take very much time to realize it! The JACG was looking for a president so it seemed like a natural progression. Forget about all of the dumb machines and put myself into something creative. I was ready for a change!

The months that followed are a bit of a blur. My doctors had put me on a medication for high blood pressure that had some adverse affects. Memory lapses, blackouts and disorientation continued for almost a year. I was very fortunate to have a great staff of people like Joe Kennedy, Bob Mulhearn, Dave Moyes and Jerry Frieze who actually ran the dog and pony show while I made decisions. A change in medication put me back in touch with reality again and I have since had no recurrences. One positive note was that I had the use of the ST for quite a few months and was able to gain some experience with GEM while not spending any money, for a change! What next?

Two years ago, my computer expertise allowed me to transfer within my company and I spent the time working in Communications with PC's and PC clones. Remember now, I'm learning so I can teach my son! Back to college so I can learn about Telecommunications. "Son, do you know what a MUX is? No? But you're four and a half years old and you can read! You don't know what a MUX is?" Oh well, I didn't expect him to learn about everything! The strange part is that, in my quest for knowledge for my son, I had learned something!

I needed an IBM PC clone! In December of 87, I purchased an Turbo XT clone with twenty megabyte, hard disk, 640 K, STD graphics board and a monochrome monitor. I had it for less than a month when I read an article in "PC Resource" magazine that told me I was on the trailing edge of technology. They've since retracted their statement but the harm had already been done. Tom Shoosmith tried to warn me but I wouldn't listen. Off to the computer store I ran.

Fortunately, the person I had bought my computer from had given me 30 days to upgrade without penalty. I did! Ready for this? A PC, AT clone with 1 MB, (no wait,) of RAM on board, 40 megabyte, partitioned hard drive with a 360 K floppy, EGA color with a Taxan 765 monitor. A Logitech mouse, Star NX 1000 printer, (what, no interface?,) multi I/O card, joystick port and a CopyII PC board, another \$1000 worth of software and I'd graduated. On February 8th. I elected to take early retirement.

The stresses of a merger and the resulting harassment had taken it's toll from my life. After 26 years with the same company I pulled the rip chord without a parachute. I didn't have another job and had to wait 13 years for retirement pay. It only took me nine weeks to find what I was searching for.

What it all boils down to my friends, is because of my knowledge of Atari and my association with the JACG; I got a

job! It's the kind of job that I've wanted for years. I'm working near home with a great group of people who appreciate my talents. Best of all, I'm working with computers. You might say that I got my job through the JACG. My only regret is that now I won't be able to attend the JACG meetings. Saturday is our busiest day!

To the membership of the JACG, I send my warmest thanks to all of you because of what you have given to me. Your patience, assistance, support and love were all instrumental in my finding both myself and a good job. I'm selling computers and software now, and I'm very happy! Yeah, o.k., they are Apples and MS/DOS machines but they are still computers and really, you can't have everything. Another important point to remember is that a computer is a computer, is a computer. That simple analogy made it easy for me to make all of the necessary transitions. The concept is always the same; it doesn't matter what color the clothes they are wearing or what language they speak. It's sort of like a real life experience.

The funny part is that the company I'm now working for, got it's start with Atari. Back in the "old" days of our founder Dick Kushner, they were a JACG supporter and even advertised in our newsletter. Yes, you old timers will remember the name of Round Valley Computer Center Inc. They have steadily grown and have three locations in New Jersey; Lebanon, Flemington and Middletown. For now, I'll be working at the Flemington store located at 24 Main Street. Once in a while you may find me at the Lebanon store. Needs of the operation, you know? You're all welcome to visit but be sure to bring plenty of money or your credit card because NO ONE leaves without buying a system!

Yes, we do give JACG members a discount so if you need something, give me a call. I'll promise not to tell the other members about your secret MacIntosh. My best wishes to you all.

Sincerely,
Bill Martin,
Former President,

Jersey Atari Computer Group

NEWSLETTER SUBMISSIONS

Submissions to the Newsletter should be in Atari writer or STWriter format, and uploaded to the Newsletter area of the BBS, or sent on a 5.25" disk to Dave Noyes. If you prefer to send Dave copy that is ready to be directly placed in the Newsletter, the copy should meet the following requirements: 0.5" left and right margins, two columns with a 0.5" central margin. The top and bottom margins should be 0.75 to 1.0". If you have an ST, and want to produce copy using Publishing Partner, then call Linda Peckham to obtain a copy of the Master Pages to be used.

IF YOU WERE PRESIDENT

by Donald Forbes - JACS

Yesterday you became President of the US. Today you were briefed, and were stunned to discover (as were most of the post-World War II presidents) that the nation you had pledged to defend is virtually defenseless against nuclear attack.

So, like them, and because a military solution is not feasible, you adopt a political solution.

Unless your name happens to be Ronald Reagan, who played in a 1940 movie entitled 'Murder in the Air.'

Writers Philip Boffey and William Broad in the new 'New York Times Complete Guide to the Star Wars Debate' point out that "Secret agent Bass Bancroft is engaged in a battle with a band of Communist spies. American scientists have developed a powerful defensive weapon that paralyzes electric currents, allowing it to ... blast enemy planes out of the sky ... Another character notes that the weapon 'not only makes the United States invincible in war, but ... promises to become the greatest force for world peace ever discovered'."

What was fantasy a half century ago is no longer just fantasy. Edward Teller, father of the H-bomb, advocated a bomb-pumped X-ray laser.

Even more fantastic devices are coming over the horizon.

Did you ever wonder what was the most significant scientific advance of all time? Research and Development Magazine in their Dec 87 issue (a thank you to our generous disk librarian Sam Cory) reported on a reader poll that ranked well ahead of all other advances the "harnessing of electricity."

Here are the results in order, adding up to 100 per cent: harnessing electricity 18.5; antibiotics 13.0; computer 10.7; vaccines 9.9; internal combustion engine 7.4; genetic engineering 5.9; solid-state technology 5.6; transistor 4.1; quantum mechanics 4.0; nuclear power 3.6; special theory of relativity 2.9; nuclear weapons 2.6; superconductivity 2.5; television 2.3; telephone 2.2; birth control pill 2.1; laser 1.2; radio diode 0.9; and electron microscopy 0.6.

Two points are worth noting. Add together all the advances that depend totally or largely on harnessing electricity (computer, electron microscopy, internal combustion engines, lasers, radio diodes, solid-state technology, telephones, television and transistors) and the total rises to 35 per cent!

Note also that superconductivity is on the list — number thirteen out of nineteen.

Which brings us to the second part of the story: how to make a paralyzing electric current that can blast planes out of the sky.

If you want a military solution instead of a political solution for a defense against ballistic missiles, what do you need?

What you need first of all is a laser beam that will travel from the ground to an orbiting mirror, which will reflect it to a second orbiting mirror. The second mirror will direct the beam to a missile leaving the atmosphere above its launch site, thereby destroying the missile.

What powers the beam? The laser device will require 1300 to 1600 megawatts, or nearly the output of two nuclear power plants, for several minutes.

And where do you get such a burst of power?

Well, that is where the new technology comes in.

The "Woodstock of Physics" took place last year at the landmark New York March meeting of the American Physical Society, when some 3000 people crowded into lobbies and hallways for a special session on high-temperature superconductivity.

This year's meeting that took place in New Orleans had more than 500 presentations on high-temperature superconductivity, ten times as many as last year.

The newest compound of lanthanum, copper and oxygen has to be made at temperatures of 2,700 degrees Fahrenheit and pressures of 65,000 atmospheres.

Superconductivity becomes possible at temperatures attainable with cheap and plentiful liquid nitrogen from the air, instead of scarce and expensive helium.

Despite all the advances in harnessing electricity, no one has been able to store electricity except on a reduced scale.

Electric power companies in many cases must take down their large steam power plants to almost zero power output in the evenings because they don't have anywhere to put the energy. Then during the day they must bring fuel-expensive gas turbines on line to meet the peak load.

Nuclear power plants simply can't cycle — they must run at full output around the clock. That means utility companies with nuclear plants have to take all the cycling in the rest of their system. And hydroelectric plants should be run around the clock because you are throwing away electricity if you don't.

Energy storage is possible — but expensive. About 2.5 per cent of US power generating capacity comes from energy storage, all in pumped hydropower. Utilities pump water uphill at night when the power demand is low, and then let it flow downhill and spin turbines to extend their peak capacity during the day. Japan and West Germany generate about 9 per cent of their capacity this way.

However, you need a neighboring reservoir, the plant is only 75 per cent efficient, and you may lose as much as 5 per cent in transmission to a far location.

Superconductivity may change all this. Nobody has ever built a superconducting coil for bulk energy storage. A small test coil in 1984 was able to store power to light 80 hundred-watt bulbs for an hour.

The electric power industry (which also happens to be the largest industry in the country) is interested

in the potential for electricity storage. The military is also interested: stored power might provide in a matter of seconds the huge energy requirements (1000 megawatts for 100 seconds) of missile-zapping laser beams.

Dr. Robert Loyd of Bechtel Corp. has a design for a billion-dollar SMES (superconducting magnetic energy storage) unit with a coil 1000 meters in diameter with 556 windings of a conductor with a cross section area the size of a cigarette pack and 1000 miles long without splices (because the splices would generate heat).

The conductor will be bathed continuously in liquid helium inside the aluminum support structure.

"There's nothing trivial about this technology ... But we're going to make it work, and we'll demonstrate that fact within the next five years."

You will find the details in the Supercurrents Magazine issue for Feb 88 (\$60 a year from P.O. Box 889, Belmont CA 94002), which brings you the latest developments in superconductivity from academia, government, industry and even the Soviet Academy of Science. (The editor is Donn Forbes, National Merit Scholar, Stanford graduate, music and desalinization expert, and further evidence of the magical power of the Forbes name from New Jersey to Buenos Aires and Wall Street to San Francisco to sway men's minds with the written word.)

So what do you do as President?

You can always pull down your copy of The Prince by Niccolo Machiavelli (1469-1527) and in the chapter on Art of War learn that:

"A prince ought to have no other aim or thought, nor select anything else for his study, than war and its rules and disciplines; for this is the sole art that belongs to him who rules ... A wise prince ought ... never in peaceful times stand idle, but increase his resources with industry in such a way that they may be available to him in adversity, so that if fortune changes it may find him prepared to resist her blows ...

"For my part I consider it is better to be adventurous than cautious, because fortune is a woman, and if you wish to keep her under it is necessary to beat and ill-use her; and it is seen that she allows herself to be mastered by the adventurous rather than by those who go to work more coldly. She is, therefore, always, woman-like, a lover of young men, because they are less cautious, more violent, and with more audacity to command her."

Or you can stay up for the Late Late Show and hope to catch:

Murder in the Air (1940) 55 minutes. Two star rating. Director: Lewis Seiler. Cast: Ronald Reagan, John Littel, James Stephenson, Eddie Foy Jr., Lya Lys. The fourth and final Ronald Reagan Bass Bancroft film, with the Secret Service agent assigned to stop enemy spies from stealing government plans.

LEARNING TO PROGRAM IN ATARI BASIC

via Neil Van Oost - JACG

LESSON 1 Version 1.02

Getting Started in Atari BASIC

(C) Copyright 1986 by Jackson Beebe

This lesson is placed in the Public Domain. Individuals, user groups and BBS's may reprint, copy or distribute it, as long as this notice remains intact with the lesson.

CONTENTS:

- Line numbers
- REM statement
- PRINT statement
- Multiple statements on a line
- NEW command
- Line editing
- RUN command
- SAVEing a program
- Directory
- LOADing a program

This is Lesson 1 of Learning to Program in Atari BASIC, brought to you by your host - Jackson Beebe. Contact me at the address at the end of the lesson. Enjoy.

This series assumes no prior knowledge of BASIC, or programming. Each lesson ends with Sample programs. Writing the sample programs is STRONGLY recommended, as the main learning in BASIC takes place during the writing of programs. ATARI BASIC is the BASIC used in these lessons.

WHAT'S NEEDED:

You need an 8-bit Atari computer, with ATARI BASIC (cartridge with 400/800 or built-in with 800XL/130XE), and preferably a disk drive. A printer is a definite plus, as it gives you the ability to print out the lessons, and make printouts of your program. This is handy in development and de-bugging. Beg borrow or check out a copy of some BASIC textbook. Examples are USING BASIC by Julien Hennefeld (lots of used copies around in campus bookstores) or INSIDE ATARI BASIC by Bill Carris. The ATARI BASIC REFERENCE GUIDE, a 15 page

booklet that comes with the computer is excellent, and nearly necessary for the Atari versions of BASIC commands.

One of the handiest of all things to keep beside your computer, is the ANALOG Computing POCKET REFERENCE CARD, an 8 1/2 by 28 inch folded 16 page collection of BASIC commands, PEEKS, POKES, keyboard values, graphics, error codes, etc. They sell it for \$7.95, which is a bit pricey, but worth it.

----- BOOTING UP IN BASIC: -----

If you have a 400/800, turn everything off. Install the BASIC cartridge. Turn on the disk drive. Install a disc with DOS. Set top of form, and turn on printer. Turn on the computer. For an 800XL/130XE, you don't need to install a cartridge, as BASIC is built in. When you see the READY prompt, you are in BASIC. You are now ready to write a BASIC program in the Random Access Memory (RAM) of your computer.

Turning on a computer with BASIC, and NO disk, takes you right to BASIC, as shown by the READY prompt, but you can't save your programs without a disk drive or cassette recorder.

You can boot up right to the DOS menu, by removing the BASIC cartridge in a 400/800, or switching BASIC out of the system by holding down the OPTION key while turning on your 800XL/130XE. Hold down OPTION until you see printing on the screen.

There are three versions of BASIC in Atari 8 bits: A, B, and C. A and B each have problems, for example version B's adding an extra 16 bytes each time you save a file, over and over, or it's fatal lockup. Version C is very nice, and behaves perfectly. It is available as a cartridge from:

Atari Customer Relations
1196 Borregas Avenue
Sunnyvale, CA 94086

The price is \$15 + 2.50 postage. Well worth it.

To find which BASIC you have, type:

PRINT PEEK(43234)

If you get 162 you have A
96 B
234 C

Fixes to B are available as type-in programs from the magazines.

----- INTRODUCTION: -----

All novices or beginners face three tasks in learning how to program:

1. Learning to operate the hardware.
2. Learning to program.
3. Learning the BASIC language.

Those of you familiar with your computers, or who already know another programming language, are already part way there!

BASIC stands for Beginners All Purpose Symbolic Instruction Code, and was formulated in 1963 by John Kemeny and Thomas Kurtz at Dartmouth College. BASIC is closely related to FORTRAN, having similar features. If you know FORTRAN, you nearly know BASIC.

BASIC is a HIGH level language, so called because it operates "high" up, away from the machine. You can issue complex commands such as PRINT, without having to worry about how many bytes you will need, or clearing space out in RAM for print, etc. These are concerns in LOW level languages, such as machine language, or assembler language. A lot of housekeeping has been done for us in BASIC, and we can concentrate on using the language, without having to understand how the machine actually works internally.

The price paid, is that BASIC runs much slower than most other languages, mainly because the software that makes addressing the machine so convenient, takes up time.

A prime reason for learning BASIC is that it's a very flexible, easy to learn language that you already own.

----- 1. LINE NUMBERS: -----

BASIC programs use line numbers before each line of BASIC code. Normal program execution begins at the lowest number (may be any number) and executes each line in numerical sequence. Programs are rarely written from start to finish in one sitting, and sometimes are written from end to beginning, or from the middle toward the beginning and end. This means you will usually be adding extra lines between existing lines as you develop or modify a program. To allow room for these extra lines, it is recommended that you initially number your lines by 10's, allowing room for later insertions. Renumbering programs are available either type-in or by D/L from bulletin board systems (BBS) to renumber existing BASIC programs. Most programs seem to begin with the number 10. Line numbers may range from 0 to 32767 in Atari BASIC. BASIC source code lines may have a maximum length of three screen lines, including the line numbers, etc.

2. REM STATEMENTS:

Any statement beginning with the letters REM, is not executed, but is a REMARK statement, used to label your program. As in all BASIC commands, it is always in upper case REM. REM statements still need line numbers. The example below is typical of lines found at the beginning of BASIC programs. As your programs grow in size and complexity, you can insert REM to label parts. Anything after the REM is just a remark or explanation.

EXAMPLE:

```
10 REM *** PAYROLL PROGRAM ***
20 REM by Jackson Beebe 10/86
30 REM Version 1.01
40 etc, rest of program
```

or for parts of programs:

```
265 REM << COMPUTE OVERTIME >>
```

A few REMS can help a lot next year, when you try and figure out how last year's program works, to modify it.

3. PRINT STATEMENT:

This statement allows you to print ON THE SCREEN of your monitor or TV. For example:

```
10 PRINT "HELLO"
```

will print HELLO on your screen. You can skip lines with blank print statements as:

```
10 PRINT "HELLO"
20 PRINT
30 PRINT
40 PRINT "THERE"
```

This prints HELLO, skips two lines and prints THERE. Note that anything in quotes in a PRINT statement, is printed EXACTLY on the screen, blanks included. You can print literals in quotes, or print the values of variables (next lesson.)

If you put a comma between items in a PRINT statement, it will skip to the next print zone. There are 10 spaces in an Atari print zone.

Example:

```
10 PRINT "HI","THERE"
```

This will print HI, space over 8 spaces and print THERE. The spaces per "print zone" are controllable by POKEing 201 with 3 to 255 (more on that later). Watch this:

```
10 PRINT ,,"HI"
```

This skips over to 20, then prints HI. Commas will come in handy for putting things in columns for printout, and printing tables.

If you put a semicolon between items in a PRINT statement (normal), it doesn't skip any spaces.

```
10 PRINT "HI";"THERE"
```

This prints HITHERE. A key feature is a trailing semicolon (left at the end of a line). This suppresses a carriage return. Don't panic. This just means the printer "sits there" waiting at the end of a line like this:

```
10 PRINT "HI";
20 PRINT "THERE"
```

This prints HITHERE.

See, the printer "waited" at the end of HI. USUALLY items in a PRINT statement are separated by semicolons, like:

```
10 PRINT "HI "; "THERE "; "JOE"
```

This prints HI THERE JOE. Note I left trailing spaces after the I and E, inside the parenthesis. You can use leading spaces when you wish to begin printing less than 10 spaces in.

```
10 PRINT "    This is indented"
```

Without a trailing semicolon, every time a program sees PRINT, it skips to a new line.

You can print on a printer, following these same rules, but using the LPRINT statement (for line printer.)

```
10 LPRINT "Hello There"
```

This will print on the printer, but not on the screen.

4. MULTIPLE STATEMENTS ON A LINE:

More than one BASIC instruction may be placed on one line, and always is in fact, in advanced programs. To do this, you separate statements with a colon.

10 PRINT "HI":PRINT:PRINT "JOE"

This prints HI, skips a line and prints JOE.

One exception! NOTHING may follow a REM. Here's an okay example:

10 X = X + 1:REM increments X

Here's a NOT OKAY example:

#####

10 REM increment X:X = X + 1

#####

This won't work, as NOTHING past a REM statement gets executed.

5. NEW:

The command NEW, clears out the Random Access Memory. When you're ready to write a program, you type NEW and hit the RETURN key. That wipes all your RAM memory clean. It erases any old programs and variables, you were using. It will not affect programs stored on disk or tape. When you LOAD in a program from disk (see 12. LOADING A PROGRAM:), it automatically clears RAM first, just as if it had a NEW command built-in.

6. WRITING A PROGRAM:

Now we are ready to write a program. For now, you may type in LAB 1, EXACTLY as it appears at the end of this lesson. After each line, hit RETURN. BASIC will let you know immediately if you have any errors. If so, simply retype the line. Each new line will REPLACE any old line, having the same line number. Instant correction.

7. LISTING

You can LIST your code on the screen at any time, by typing LIST and RETURN or L. and RETURN. Individual lines may be listed as:

L.40

to list line 40. Ranges of lines may be listed by:

L.10,120

to list lines 10 through 120 in a block. You may stop and start the lines scrolling up off your screen during listing, by alternate presses of CONTROL+I. This means hold down the CONTROL key while pressing the I key. Lines may be entered into programs out of sequence. Listing will always list then in sequence.

You can Clear your screen with CONTROL+CLEAR. Clearing and relisting is done every few minutes when writing in BASIC, so you can see the lines in sequence, and watch the program flow.

You can copy lines easily, by listing a line, then using cursor control arrows, placing your cursor on top of the existing line number, changing it and hitting RETURN. The original line, AND the identical line with the new number will both be present. This also allows manual renumbering of lines in a program.

Source code may be listed to your printer in two ways. You may use:

LIST "P:" or LIST "P:",10,120

Another option is to COPY the program from disk to the printer, by going to DOS and selecting COPY. When asked, copy from D1:FILENAME to P: for the printer, or S: for the screen or E: for the screen also.

Printouts are very handy, as you can quit for the night, but study the listed printout for bugs, and areas to improve.

8. LINE EDITING:

If you discover a boo-boo in a line, you can edit it. Type L. followed by the line #, or LIST followed by the line # as:

L. 35

This will list that line 35 on your screen. Using your control and arrow keys, put your cursor on the line, and retype, delete, insert (using CONTROL+DELETE or INSERT) etc, to correct the line. Monkey around and try it. When you change a line, the rule is that you must hit RETURN with the cursor IN that line, to save your changes. Experiment with it. It's great. SHIFT+INSERT and SHIFT+DELETE work on entire lines. Try them.

To get rid of a line you don't want, simply type the number of the line followed by RETURN. It wipes it out. Try it. That's deleting lines.

The Atari has a screen editor, that will let you edit any lines on the screen. For the novice, this can get you in trouble so fast, that you screw up a whole screen full of

lines at once. SAVE often when editing, and only edit one line at a time to begin. For screen editing, you must hit return with your cursor still in a line to save changes.

9. TO RUN A PROGRAM:

When you have a program typed in correctly, LIST it, and make sure it's right. Type RUN (no line number) and RETURN. Your program should begin executing, and produce output. It's STILL in memory, and you can LIST it, or RUN it again. You can usually stop a program with the BREAK key.

The RUN command is used in IMMEDIATE Mode (no line number). When we use line numbers, we're in PROGRAMMING Mode. When we type commands in IMMEDIATE mode, we're talking directly to the computer. You can print in immediate mode. Try:

```
PRINT "ZOWIE"
```

It prints, but it's also gone, and not in memory. Try a LIST, and you'll notice it's not there.

10. SAVING A PROGRAM:

DISK DRIVE:

To save a program to disk, you think up an eight letter filename. It has to start with a letter, and can only be eight characters (letters and numbers). No spaces are allowed. If you wish, you can type a period, and add a three letter extension to label programs. It's usually used that way. For example GAME.BAS would be a game in BASIC. To save a program, type in a statement in the form that follows. The D refers to disk drive. If you use only D, it assumes D1 or drive #1. Use the proper number if you have multiple drives.

```
SAVE "D:FILENAME" and hit RETURN.
```

Your disk should spin, and save the program under the name you gave it. Think up good names, 'cause when you have hundreds of programs, you need to be able to identify them from their name alone.

At this point the program is STILL in memory, AND a copy stored on the disk. You could remove the disk, and shut down the system, and your program will remain on the disk.

CASSETTE:

You must use an Atari tape recorder to save programs. Model 410 recorders are very inexpensive, and often available for

loan from friends who have moved up to disk drives. Model 1010 recorders are newer. I would not consider buying a recorder new, but save my money toward a disk drive.

To SAVE a program to cassette, rewind the tape to the beginning, or the place you want to record at. Type CSAVE and RETURN in Immediate mode. You will hear two beeps, to remind you to push two keys. Push down both the PLAY and RECORD buttons at the same time on the recorder. Now push RETURN again, to start the recording. When your program has been saved to tape, the tape will stop turning. Note the counter number for future reference. No filenames are possible with tapes.

11. DIRECTORY:

To see a list of the files on your disk, you must go to DOS (Disk Operating System.) This is done by typing:

DOS

This is in immediate mode. When you get to the DOS menu, follow your DOS's instructions to look at your files. When finished, return to your BASIC cartridge, usually menu option B. If you are using a MEM.SAV file, your BASIC program will remain unchanged in memory. Without, when you return from DOS, your BASIC program will be gone into never never land, and lost. This is no problem if you remember to SAVE it before going to DOS. You can load it back in. You'll learn quickly after losing a few programs that you hadn't saved yet. Read your disk manual about this.

12. LOADING A PROGRAM:

DISK DRIVE:

To get that program back the next time you use your computer, install BASIC, turn on the disk drive, and printer. Insert the disk. Turn on computer. The disk should spin and give you READY prompt. You're in BASIC. To get back your old program, type:

```
LOAD "D:FILENAME"
```

Your disk should spin, load in the program, and say "READY". To see it, type L. or LIST. To run it, type RUN. To stop it, usually the BREAK key will do it. You can start again with RUN, or sometimes by typing CONT for continue.

If you change your program, with line editing, or by adding to it, be sure to save a copy with the changes. I save my program often while writing, in case I screw it up totally, or there's a (GASP) power failure. Programs saved on disk survive.

二

process. You will hear bleeps as the tape loads in. Sooner or later, the tape will finish loading. Type LIST or RUN. Do not be alarmed if your program failed to load accurately. Simply rewind, and try again. Tape loads correctly most of the time. Keep your heads clean, and if all else fails, have your local hardware whiz realign your head. Tape is fussy.

PROBLEM 0 (can be filenameed PROB0)

```

10 REM *** PROBO ***
20 REM Your Name - Date
30 REM
40 PRINT CHR$(125)
50 PRINT "HELLO WORLD"
60 PRINT:PRINT:PRINT
70 PRINT "I am communicating with the world."
80 PRINT
90 PRINT "          by Your Name"
100 END

```

Type the program in. Save it to disk with `SAVE "D1:PROBO"`. When it's done and a copy saved on the disk, run it by typing `RUN`. You should see output as follows:

I am communicating with the world.

by Your Name

This program is for your own use. Do not upload this program to the BBS.

Write a program to produce the following output:

Write a program to print:

A	TTTT	A	RRRR	I
A A	T	A A	R R	I
A A	T	A A	R R	I
AAAAA	T	AAAAA	RRRR	I
A A	T	A A	R R	I
A A	T	A A	R R	I

LET statement	DATA statement
Numeric variables	Math rules
String variables	END statement
READ statement	INPUT statement

MAY 1988



PDG-16

BY Linda Peckham

UTILITY DISK #4

DISK OF THE MONTH: #92

This disk is filled with a variety of utilities, and was one of the disks obtained from S.P.A.C.E.

AUTODISK.PRG loads files into a ramdisk on boot-up. This program is used in an auto-folder.

SPELL.PRG is a public-domain spell-checking program.

DASDRAFT is a folder containing two GDOS fonts, and an **ASSIGN.SYS** file for use by the commerical program, Dollars & Sense.

DRFLOPPY is a folder for the adventuresome. It contains a program that will read and copy sectors from the floppy disks.

DSLIDE contains the Deluxe Slide Show program. The program can handle .TN7, PI7, PC7, and NEO picture formats, and can use a script program.

FONTEdit is a folder containing the public domain font editor for Publishing Partner.

LABELER is a folder containing a disk label maker program.

MOBZDILE.ACC allows auto-dialing from within a GEM program.

TURTLE -- If you have a hard disk, **TURTLE** contains the programs needed to back and restore the disk. Turtle includes the ability to backup individual partitions, incremental backup (from the last date), and restore.

NEW DISKS

#101 PRINTMASTER UTILITIES This disk contains several printmaster utilities, and two demos of for-sale utilities. One utility allows icons to be saved in the DEGAS format, but works in Mono only. A second utility allows the printout of all the icons and their names. It requires an Epson FX compatible. The disk also contains two icon files and a border file. (Note: The **REWART** icon file contains several R-rated icons.)

#102 TINY DISK #8: FRACTALS This disk contains low-rez TNY pics of fractals. This disk is from the ST-Express archives, courtesy of John Dean.

#103 TINY DISK #9: MISC. This disk contains

miscellaneous TNY pics. Another disk from ST-Express archives.

#104 GFA BASIC SAMPLER This disk contains the GFA Basic source code for a number of programs, including Monopoly, Arcshell, Stoneage and Neolad.

#105 CYBERPAINT ANIMATION This disk contains a Cyberpaint animation from Germany. Includes the **ANIMATE3.PR**G. Requires Color, and 1 Megabyte.

#106 CYBER ANIMATIONS: ST-VISION This disk contains more animations from Germany, this time produced from CAD-3D. **ST-VISION** is a newsletter produced in Germany, with our friend Michael Shutz being one of the people producing it.

UPDATES

This month, several disks have been updated.

#57 STWRITER This disk contains the latest versions of the GEM and non-GEM versions of ST-Writer. Everything is now un-arc'd. There are two folders, one each for the two versions. Files used by both programs are in the root directory. If you're a newcomer to the ST world, this is a good, basic word-processor with which to start.

#58 MARK JOHNSON'S C. This public domain C Compiler is now up to Version 2. This disk contains the C Compiler, some Libraries and Utilities. If you're new to C, you will need some books to use this.

SUBMISSIONS

Submissions to the library should be made on singlesided disks when possible. 10-sector formats are acceptable, but extended track formats should be avoided. We prefer programs which will run on 512K systems, color or mono. Documentation is preferred, and any requirements should be clearly noted. **COPY-RIGHTED SOFTWARE WHICH IS EITHER NOT SHAREWARE, OR NOT OWNED BY THE SUBMITTER, WILL NOT BE ACCEPTED!**

NEW DISK PRICES!

For those of you who weren't at the last club meeting, the disk prices for members has dropped! The disk-of-the-month costs \$2.00 for non-members, while the regular disks cost \$3.00. If you are ordering by mail, add one dollar shipping & Handling per disk. If you are a non-member, the disks cost \$5.00 at the meetings, and \$6.00 by mail order. Remember: Have your membership card handy at the meetings!

ST DISK LIBRARY LIST

VARIETY

- #86 JACO PROGRAMMERS' CONTEST (16 BIT)
- #93 COOKBOOK & KERMIT -- A cookbook program, KERMIT telecom., more.

TELECOMMUNICATIONS

- #96 TELECOMM DISK #1 [SPACE054] ST-TO-ST comm programs (with instr.) Flash Downloader, more.
- #93* KERMIT -- Upload/Download protocol to communicate with VAX systems.
- #80 UNITERM 2.0. NOTE: Disk now contains 2.0 docs.
- #70D CITADEL BBS 3.1 (1 Meg req'd).

APPLICATIONS

- #100 PRINTMASTER ICONS & BORDERS
- #83 BOWLING STATISTICS (for bowling teams)
- #82 BOWLING MANAGER (for bowling leagues)
- #60* PUBLISHING PARTNER DISK #4.
- #57 STWRITER. STWriter 1.75, 2.00 (GEM), docs, ARC.TTP
- #53 PUBLISHING PARTNER DISK #3.
- #51 FINANCIAL AIDES.
- #49 PM-TO-TS.
- #39 PUBLISHING PARTNER DISK #2.
- #38 PUBLISHING PARTNER DISK #1. Printer Drivers.
- #19 MICRO EMACS. EMACS text editor.

MUSIC

- #84 MUSIC PLAYERS: Music Studio & Music Cons.Set
- #73D DIGITIZED MUSIC 4: Hot Chocolate
- #56 SONG DISK #2. 42 Music Studio Songs
- #55 SONG DISK #1. 42 Music Studio Songs
- #50 MIDI MUSIC. CZVOICE, MIDI sequencer, Midisoft demo, 75 Music Studio Songs (ARC required)
- #42D DIGITEZED MUSIC 3: OXYGENE
- #41D DIGITIZED MUSIC 2: MATTHEOD
- #40D DIGITIZED MUSIC 1: FOREIGN AFFAIR

GRAPHICS

- #85 SPECTRUM DISK #2: Computer Eyes & DigiSpec
- #76 BEST OF GERMANY #2. (TNY)
- #75 BEST OF GERMANY #1. (TNY)
- #74D SILVER SPHERE (MONO)
- #72 ASTERIX
- #71 SPACE STATION (CAD 3D 2.0, COLOR)
- #69 STAR WARS COLOR. (CAD3D 2.0, COLOR)
- #68 STAR WARS MONO. (CAD 3D 2.0, MONO)
- #63 STAR TREK. (CAD3D 2.0, COLOR)
- #62 JUGGLER. The ST version of AMIGA's Juggler.
- #60* CLIP-ART DISK #3.
- #59 CLIP-ART DISK #2.
- #52 CLIP-ART DISK #1.
- #44 AEGIS ANIMATOR DEMO. (ARC'ed)
- #43D ANIMATION DISK
- #34 TINY DISK #5.
- #33 TINY DISK #4.
- #32 TINY DISK #3.
- #31 TINY DISK #2. 17 TINY pictures, nudes
- #30 TINY DISK #1.
- #28 SHINY BUBBLES. Animation from Xanth.
- #24 PENTAGON. CAD-3D (1.0)
- #7 GRAPHICS DEMOS. (1985 PROGRAMS)

UTILITIES

- #99 UTILITY DISK #6 [SPACE059] Disk cataloger, disk formatter, STARTGEM, MONOSHOW, more.
- #98 UTILITY DISK #5 [SPACE058] 1st Word utilities, compareres, more. BASIC req'd for some.
- #97 ACCESSORY DISK #2 [SPACE057] Calculators, disk formatter, Word400, WTERM, SUPERBOOT.
- #92 UTILITY DISK #4 [SPACE040] HD utilities, spell checker, labeller, ramdisk loader, more.
- #66 UTILITY DISK #3. DCOPY19.1, disk formatter, disk/file compressor, bootup programs.
- #47 UTILITY DISK #2. ARC.TTP, ARC shells, address book, disk fixer, file hider, undeleter, sector editor, directory lister, more.
- #27 UTILITY DISK #1. Accessory loader and 5 accessories

GAMES

- #94 GAME DISK #11 [SPACE042] Dragon, LARN, Laser, Pong, Pool
- #90 GAME DISK #10 [SPACE026] An EAMON adventure, Football, ST Aggression.
- #89 GAME DISK #9 [SPACE024] Adventure-writer, and Flight Simulator scenario files.
- #79 EAMON. Adventure game, including two scenario files.
- #78 GAME DISK #7. Quiz, ST Invaders, Tunnel
- #77 GAME DISK #6. Wheel of Fortune 2.0, Wheel of Fortune Editor, Labyrinth
- #46 GAME DISK #5. Megaroids, Wheel of Fortune, Blackjack, Daleks, Azarian, slotmachine
- #45 PUZZLE PUZZLE. A great shareware monochrome game.
- #37 GAME DISK #4. MONOPOLY, Haunted House
- #36 GAME DISK #3. Checkers (acc & prg), maze of caves adv. game, Reversi.BAS, Flight Simulator situation file
- #35 GAME DISK #2. Colossal Cave Adventure, Daleks, Missile Command, Nightcrawlers, Ogre, solitaire poker, Startrek.bas
- #29 GAME DISK #1. Blackjack, clewso, Eliza, Joust (beta test), maze generator, mono pool game, Yahtzee, more.

LANGUAGES

- #95 ICON [SPACE043] A list-processing type language.
- #91 C SAMPLER #2 [SPACE027]
- #88 BASIC SAMPLER #2 [SPACE014]
- #87 LANGUAGE DISK [SPACE008] TinyBASIC, XLISP, Assembler
- #58 MARK JOHNSON'S C. A public domain C language.
- #48 PD FORTH. A public domain FORTH, version 1.1
- #9 LOGO SAMPLER. Simple LOGO programs
- #8 C SAMPLER. Simple C programs, includes source and run-time files.

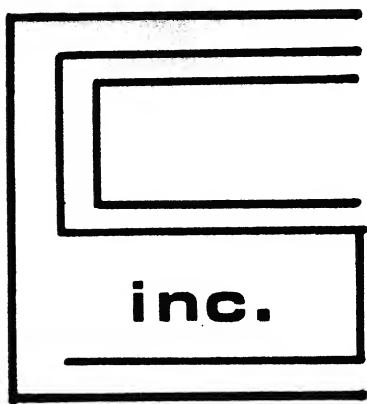
EMULATORS

- #54 XFORMER. The 8-bit Emulator.
- #26 CP/M. The Emulator for CP/M (arc'ed, includes arc.ttp)

COMMERICAL DEMOS

- #67 ATHENA II. Demo version of a CAD program.
- #61 EASY-DRAW. Demo version of a drawing program.
- #50* MIDISOFT. MIDI Sequencer Demo (arc'ed)
- #17 ZOOMRACKS I. A database using a card-rack analog. By QUICKVIEW.
- #5 4X FORTH. Demo version of the FORTH language, by the DRAGON GROUP.

(Disk numbers not listed above have either been removed from the library, or are in process of being reorganized and updated. * indicates that the disk is listed twice. D indicates that the disk is double-sided, and that one megabyte of memory is probably required.)



**COMPUTER SYSTEMS
CONSULTANTS, INC.**
Box 873, 897 U.S. RT. 130
Hightstown, N.J. 08520
(609) 448-8888/9

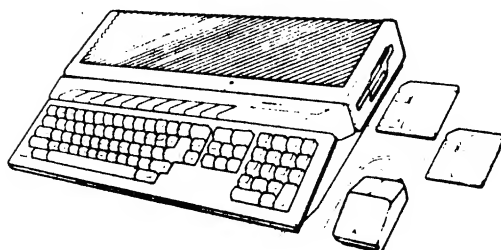
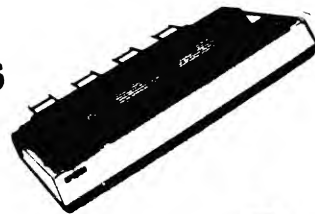
**BEFORE CALLING US, CALL AROUND
THEN CALL US FOR LOWEST PRICE!**

**We Are A Certified Atari/Epson
Service Center/Dealer**

Low Overhead = Low Prices



- **MEGA ST's**
- **520 ST color or mono**
- **1040 ST color or mono**
- **ALL EPSON Printers**
- **ST Software**
- **Peripherals**
- **Cables, etc.**



**visa-m/c
9 am - 5pm
mail orders**

JACG MEMBERSHIP APPLICATION

DUES: US (inc. APO, FPO, etc.) 3rd Class mailing
First Class mailing of Newsletter, or
Foreign Subscriptions (US Currency)

\$25.00

\$30.00

MAIL TO: ROBERT P. MULHEARN
8 CRESCENT ROAD
PINEBROOK, NJ 07058

☐ RENEWAL ☐ NEW MEMBER ☐ FORMER MEMBER ☐ 8-BIT ☐ 16-BIT ☐ BOTH

NAME _____ MEMBER # _____

ADDRESS _____

CITY/STATE/COUNTRY _____ ZIP CODE _____

HOME PHONE NUMBER _____

DATE _____ 1ST CLASS MAIL _____ 3RD CLASS MAIL _____

**NEW TO THE ATARI?
NEED A LITTLE HELP?**



**MAYBE A JACG BIG
BROTHER CAN HELP!**

**GIVE US A CALL
201-469-6199**

MEMBERSHIP RENEWAL

Take a moment and look at your mailing label on a recent issue of the JACG Newsletter. Check the upper right hand corner. This is the month/year when your membership expires. Try to renew at least one month early. This helps us keep our bookkeeping in order and avoids your missing any issues of the Newsletter.

There are two easy ways to renew:

1. Fill out a membership renewal form in the front lobby before our monthly meeting and present it with \$25 (in cash or check) to the Treasurer. Add \$6 for first class mailing of the Newsletter.

2. Copy the information on your mailing label and send, with your remittance to the address listed above.

CHECK YOUR LABEL TODAY!!!

NEWSLETTER ADVERTISEMENTS

RETAILERS - MANUFACTURERS - VENDORS

How would you like to reach a targeted audience of over 700 ATARI computer users? This newsletter has a press run of 800 per month, is read by members and non-members alike, and is sent to over 60 other ATARI User Groups across the U.S. and in several other countries.

Advertising is available on a first-come and space-available basis. Camera-ready copy, accompanied by payment, must reach the Editor by the 20th day of the month preceding publication. JACG reserves the right to make decisions concerning the placement of ads within the Newsletter and editing or rejecting advertisements deemed unsuitable.

ADVERTISING RATES

Full page (7-1/2 x 9) ...\$48.00
Half page\$25.00
Quarter page\$18.00



Discount rates available on request. Contact:

Gary Gorski
213 Sheridan Avenue
Roselle, NJ 07068

J A C G
JERSEY ATARI COMPUTER GROUP
8 CRESCENT ROAD
PINE BROOK, NEW JERSEY 07068

BULK RATE
U.S. POSTAGE
PAID
PINE BROOK, NJ
PERMIT # 56

Universe 516-367-2850 *
WQNR 516-678-7456
Hackers 11 884-4140
Traffic 11 732-6179

*JULY 1988

JACG NEWSLETTER - VOL. 8, NUM. 3

579-2069 - Arena
367-7166 Nassau County
MAY 1988

JACG EXECUTIVE COMMITTEE

231-5611 Cove PRESIDENT DOUG VAN HOOK 40 Meadow Lane Clifton, NJ 07012 201-472-0637	VICE PRESIDENT, 8 BIT JOHN N. DEAN RFD #2 Box 788 Sussex, NJ 07461 201-827-2460 (business)	VICE PRESIDENT, 16 BIT LINDA PECKHAM 111 Paterson Avenue Apt 1 Totowa, NJ 07502 201-790-3061
367-2834 Univ. Voice TREASURER JACK RUTT 52 Dacotah Avenue Rockaway, NJ 07866 201-625-0273	EDITOR DAVID B. NOYES 3 Ann Road Long Valley, NJ 07853 201-852-3165	SECRETARY & MEMBERSHIP ROBERT P. MULHEARN 8 Crescent Road Pinebrook, NJ 07058 201-575-0067
LIBRARIAN SAM CORY P.O. Box 7 Towaco, NJ 07082 201-334-4443	PRESIDENT EMERITUS THOMAS PAZEL 70 Mitchell Road. T-7 Hackettstown, NJ 07840 201-850-9017	MAIL ORDER LIBRARIAN BRET CALLEGARI 95 Cheasapeak Avenue Lake Hiawatha, NJ 07034
DISK LIBRARIANS Dave Green Doug Van Hook Charles Miller (ST) Linda Peckham (ST)	BBS SYSOPS Paul Machlaverna Gary J. Gorski Thomas Shoomith	ADVERTISING & SALES GARY J. GORSKI 313 Sheridan Avenue Roselle, NJ 07203 201-241-4554

The Jersey Atari Computer Group (JACG) is an independent, informal organization of ATARI computer users. It is not affiliated with ATARI or any other commercial enterprise. Opinions expressed in this publication reflect only the views of the individual author, and do not necessarily represent the views of JACG. Material in this Newsletter may be reprinted by other Atari User Groups, provided the author (if applicable) and JACG are given credit. Only original work may be reprinted. Questions concerning reprinting should be addressed to the Editor.